



# Moab Project Public Participation Plan

November 2005



U.S. Department  
of Energy

## Office of Environmental Management

# **Moab Project Public Participation Plan**

November 2005

Prepared for  
U.S. Department of Energy  
Grand Junction, Colorado

Work Performed Under DOE  
Contract Number DE-AC01-02GJ79491

## Contents

	Page
Introduction.....	1
Site Description.....	1
Background.....	2
Area Profile.....	6
Stakeholders.....	6
Issues and Concerns.....	7
Project Decision-Making Process.....	8
Public Participation Activities .....	9
Public Meetings .....	9
Public Availability Sessions .....	9
Small Group Meetings .....	9
Briefings for Local Officials.....	9
Fact Sheets, Information Updates, and Technical Summaries .....	9
News Releases .....	10
Display Ads/Articles.....	10
Internet Website.....	10
E-mail Address.....	10
Toll-Free Hotline .....	10
Public Reading Rooms.....	10
Educational Programs and Outreach Activities .....	11
Speakers Bureau.....	11
Local Office .....	11
Information Contacts .....	11
History and Highlights.....	12

## Figures

Figure 1. Site Location.....	3
Figure 2. Moab Project Detailed Site Boundaries (2005).....	4
Figure 3. February 2005 Aerial View of the Moab Project Site.....	5

This Page Intentionally Blank

## Introduction

This Public Participation Plan provides information on the U.S. Department of Energy (DOE) public participation policy and the Moab Project and identifies methods of communicating with the public to enhance public participation in the Moab Project decision-making process. This plan will be updated annually or as needed.

DOE regulations and policy mandate public involvement in decision making. Public participation provides DOE with the opportunity to gather opinions, perspectives, and values from the public and enables it to make better, more informed decisions. DOE must also comply with additional guidance on public participation provided in the National Environmental Policy Act, in the Uranium Mill Tailings Radiation Control Act, and in other federal and state agency requirements as they pertain to such items as permits and notifications.

Certain core values are associated with the DOE public participation policy. These include:

- Accessibility—DOE employees who are available, approachable, and open to the public.
- Fairness—objectivity and freedom from bias toward any side.
- Innovation—introducing new ideas, methods, and approaches associated with communication methods or remediation technologies.
- Peer review—examination of key issues and decisions by internal and external peers.
- Credibility—commitment to pursue sound and dependable science and technology.
- Timeliness—allowing sufficient time for stakeholders to participate in DOE decision-making processes, timely responses to stakeholder comments and requests, and timely DOE decision-making processes supported by public participation.

## Site Description

The Moab Project Site (formerly known as the Atlas millsite) is a former uranium-ore processing facility located about 3 miles northwest of the city of Moab in Grand County, Utah ([Figures 1 and 2](#)), and lies on the west bank of the Colorado River at the confluence with Moab Wash.

The site is irregularly shaped and encompasses approximately 400 acres; a 130-acre uranium mill tailings pile occupies much of the western portion of the site. Steep sandstone cliffs border the site on the north and southwest. The Colorado River forms the southeastern boundary of the site. U.S. Highway 191 parallels the northern site boundary, and State Highway 279 crosses the western portion of the site. The entrance to Arches National Park is located less than 1 mile northwest of the site across U.S. Highway 191; Canyonlands National Park is about 12 miles to the southwest. The Union Pacific Railroad traverses a small section of the site just west of State Highway 279, then enters a tunnel and emerges several miles to the southwest. Moab Wash runs northwest to southeast through the center of the site and joins with the Colorado River. The wash is an intermittent stream that flows only after significant precipitation or snowmelt. The Moab Project Site lies directly across the Colorado River from the Scott M. Matheson Wetlands Preserve, also known as Moab Marsh. This area consists of marsh and riparian habitat, including dense growth of tamarisk. The Preserve is jointly owned and managed by the Nature

Conservancy and the Utah Division of Wildlife Resources. The area has improvements such as walking paths, wildlife viewing areas, and educational kiosks.

## **Background**

The Moab Project Site was a Uranium Mill Tailings Radiation Control Act Title II site licensed by the U.S. Nuclear Regulatory Commission. With the enactment of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Congress designated the site as a Uranium Mill Tailings Radiation Control Act Title I site. On October 25, 2001, DOE assumed ownership of the Moab Project Site. The DOE Environmental Management office in Grand Junction, Colorado, is responsible for reclamation and stewardship of the site.

In November 2004, the DOE Moab Project team published a draft Environmental Impact Statement (EIS) that presented a detailed evaluation of proposed on-site and off-site alternatives for permanent disposal of the uranium mill tailings pile at the Moab Project Site. The proposed alternatives also included cleanup and reclamation of the millsite property and certain off-site properties known as vicinity properties. The three off-site disposal alternatives evaluated were the Crescent Junction site immediately northeast of the town of Crescent Junction, Utah, and 28 miles northwest of Moab; the Klondike Flats site, 17 miles north of Moab; and the existing White Mesa Mill site near White Mesa and Blanding, Utah, and about 85 miles south of Moab. The proposed alternatives for transporting the tailings to the off-site disposal locations were rail (Crescent Junction and Klondike Flats sites only), truck, and slurry pipeline.

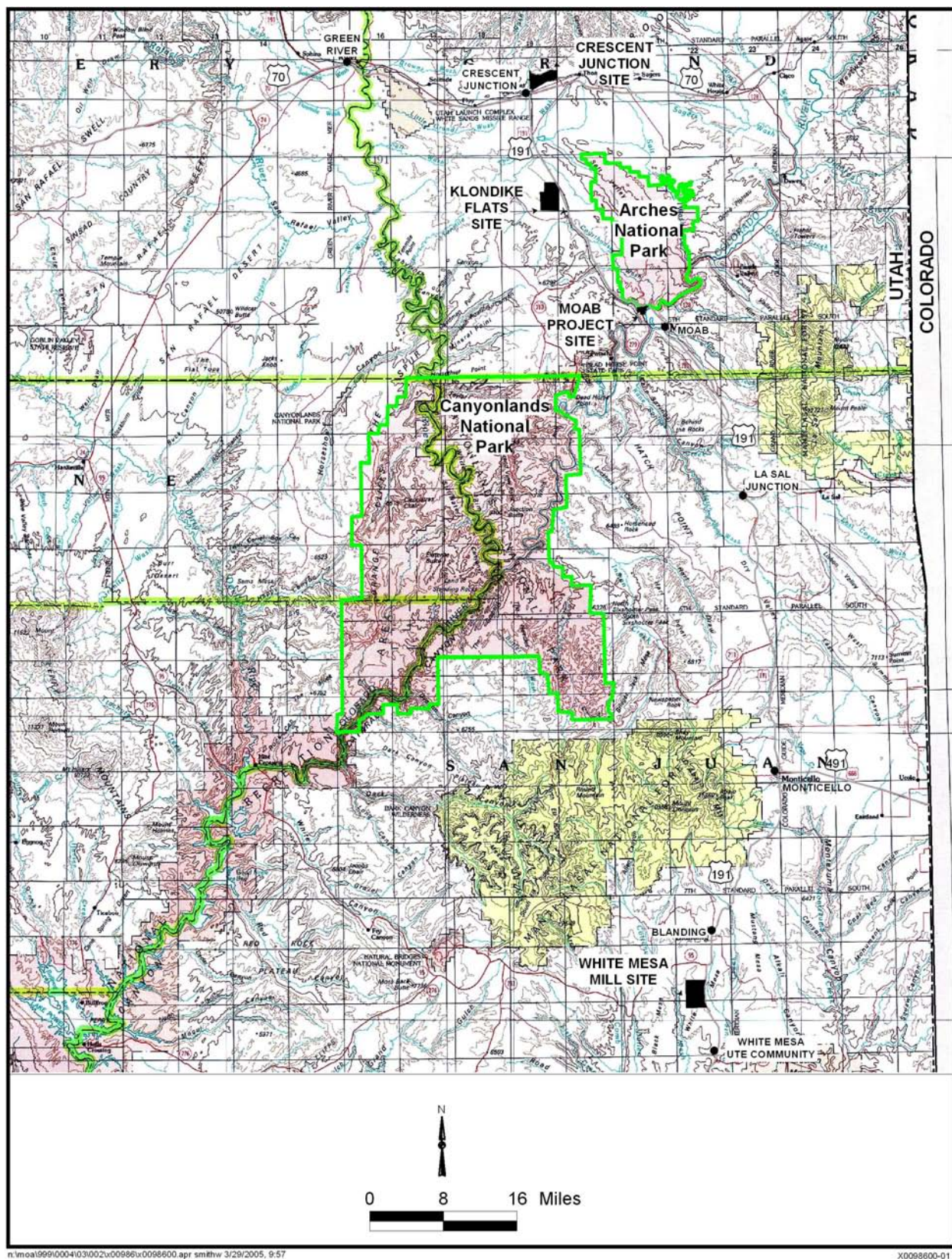
DOE announced in April 2005 that the preferred alternatives were active ground water remediation and off-site disposal of the tailings pile and other contaminated materials at the proposed Crescent Junction disposal site using predominantly rail transportation. DOE issued the final EIS in July 2005 and the Record of Decision in September 2005. The final EIS included the preferred alternatives for remediation of the Moab Project Site, and the Record of Decision detailed the selection of the preferred alternatives and the basis for that decision.

Figure 1 shows the general location of the site relative to Moab, other geographical locations, and the off-site disposal alternative locations. Figure 2 shows the detailed site boundaries. [Figure 3](#) provides a 2005 aerial view of the site.

In 2003, DOE implemented the first phase of an interim action system at the site to address concerns regarding elevated ammonia levels in ground water discharging to the Colorado River. The interim action consists of a series of wells designed to intercept contaminated ground water before it reaches the river. Water from the wells is pumped to a lined evaporation pond installed on top of the tailings pile. A 17-acre land-applied spray evaporation sprinkler system was installed in spring 2004 to enhance evaporation of water pumped to the evaporation pond. The sprinkler system consists of micro-spray nozzles on 25-foot centers. The system was expanded to include an additional 11 acres in March 2005.

The following information about the Moab community and Grand County was compiled from the *Grand County General Plan Update*, prepared by Four Corners Planning, and the *Community*





n:\moa\999\0004\03\002\000986\0098600.apr smithw 3/29/2005, 9:57

X0098600-01

Figure 1. Site Location



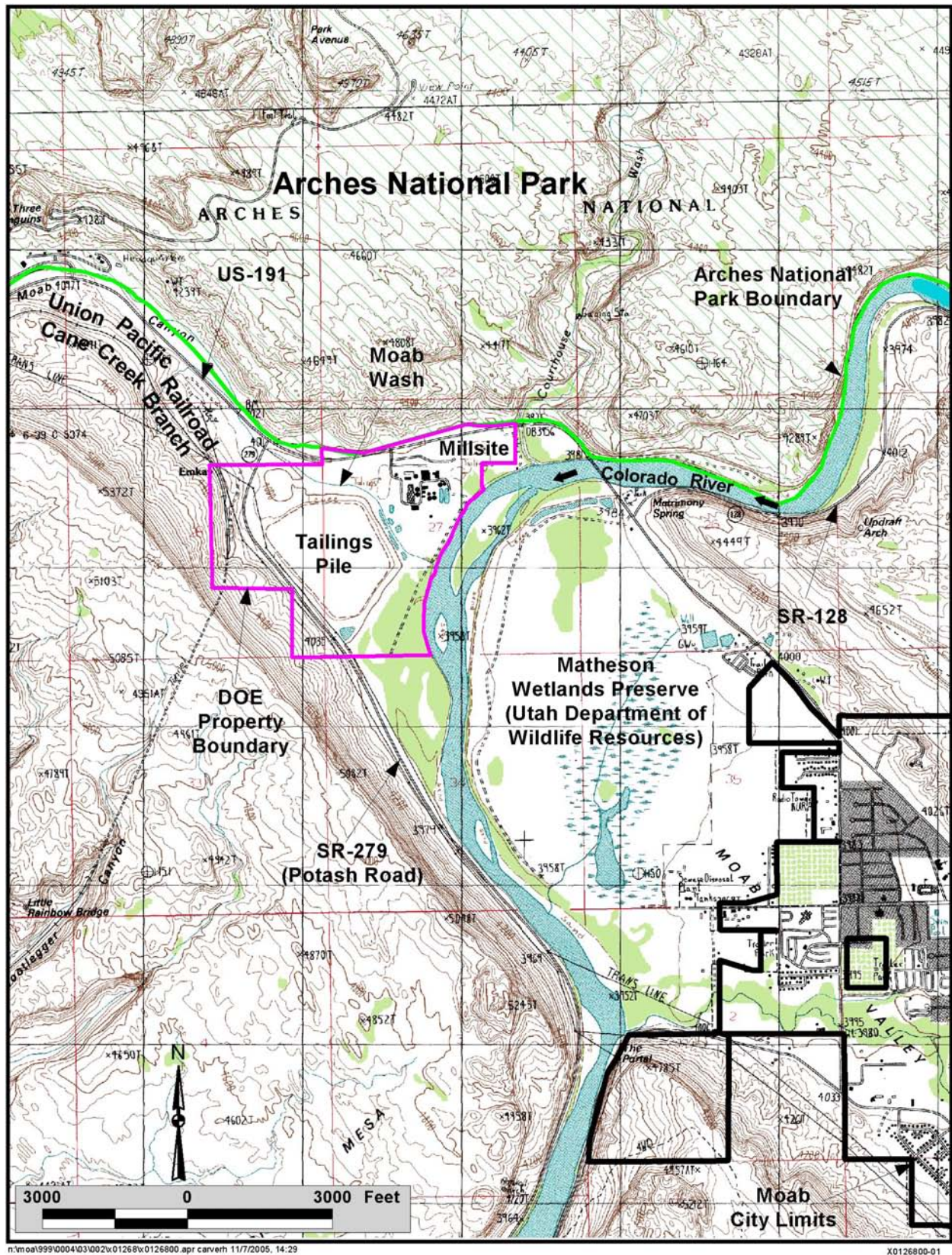


Figure 2. Moab Project Detailed Site Boundaries (2005)



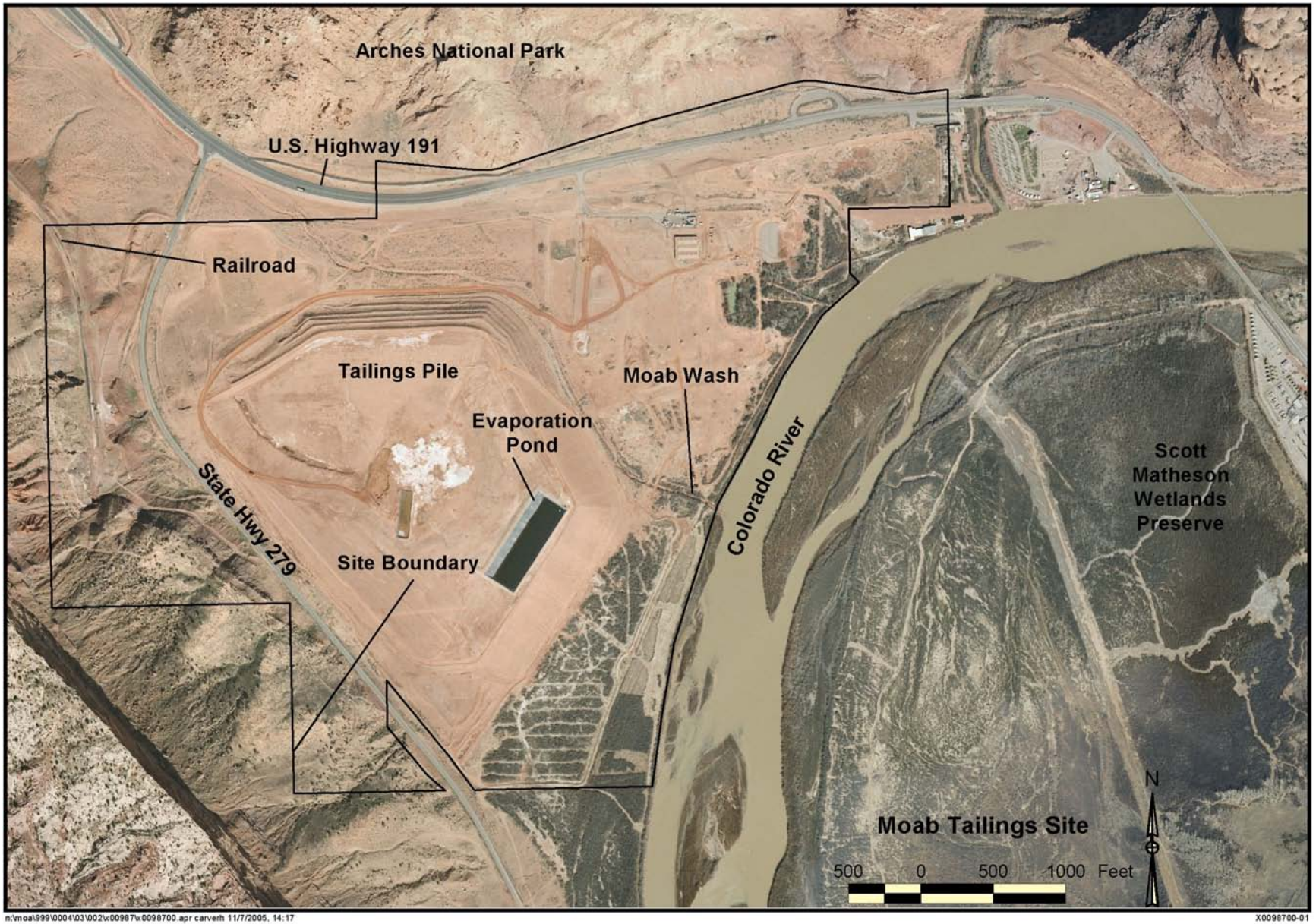


Figure 3. February 2005 Aerial View of the Moab Project Site

*Profile for Moab and Grand County, Utah*, created by the Moab Area Economic Development in cooperation with the State of Utah, Department of Economic Development. Additional information was gathered from the county profile on the State of Utah website and the U.S. Census Bureau 2000 census website.

## **Area Profile**

Moab is the Grand County seat and the principal city of southeastern Utah. Southeastern Utah has the nation's largest concentration of national and state parks, monuments, and recreation areas. Within a 100-mile radius of Moab are four national parks, four state parks, and numerous national monuments and national historic sites.

Small farms and orchards, livestock ranching, and potash mining were the major economic activities during much of the area's history. The uranium boom in the 1950s brought the first real population expansion to the area. In recent years, Moab has become noted for mountain biking and also for whitewater rafting in the Colorado River. Tourism has become the major economic base. In the 2000 census, the population of Moab was 4,779.

In addition to Moab, the community of Crescent Junction, which is also in Grand County, will be affected by the relocation of the uranium mill tailings pile in Moab to that site for permanent disposal. Annually, more than 1 million people visit Grand County for recreation. The county government is working to diversify its economy by targeting outdoor gear manufacturers, small high-tech and telecommunications-related firms, television and motion picture production, and agriculture, and by developing natural resources.

In the 2000 census, the population of Grand County was 8,545. The county per capita income in 2001 was \$20,710, which is below the state average per capita income of \$24,033. Grand County's 2002 civilian labor force was 5,469, and the unemployment rate was 7.4 percent.

Tourism accounts for at least 45 percent of Grand County's employment, and government accounts for 19 percent. Grand County School District is the largest employer in the county. The local grocery store chain, county government, and National Park Service are also among the major employers.

Media in the area consist of one private and one public radio station, one weekly newspaper, and a local television station that presents local, national, and world news. Regional, national, and international newspapers are readily available.

## **Stakeholders**

DOE recognizes that stakeholders may be any affected or interested party, including

- Citizens of Grand County, Utah.
- Native American tribes.

- Local media.
- Local elementary and secondary schools.
- Local city and county governments.
- State governmental agencies.
- Congressional delegations.
- Elected State of Utah officials.
- Federal agencies.
- Environmental organizations.
- Business owners.
- Service organizations.
- General public using U.S. Highway 191 traveling into and through Moab.
- Other interested individuals.

## **Issues and Concerns**

Local citizens, environmental groups and agencies, and downstream users of water from the Colorado River have expressed concern over the effects of contamination from the site on the river. In 1999, the U.S. Nuclear Regulatory Commission issued its *Final Environmental Impact Statement Related to Reclamation of the Uranium Mill Tailings at the Atlas Site, Moab, Utah* and received numerous comments both in favor of and opposed to the proposed action of capping the uranium mill tailings pile in place.

Other expressed concerns include dust control, contamination from the site in the Colorado River, potential health effects, future land use, and general aesthetics associated with the pile being observable from U.S. Highway 191 that leads from Interstate 70 into Moab and also from the main Arches National Park access road.

During the public scoping and public hearing processes for DOE's draft EIS, citizens commented on the potential impacts to nearby communities of the disposal site alternatives and the transportation haul and pipelines routes that were proposed.

The announcement of the preferred alternative to relocate the tailings to Crescent Junction spurred additional concerns, such as transportation impacts, including the increase in truck traffic to haul the tailings and covering of the tailings during rail transport, availability of and infrastructure for obtaining construction and drinking water for the project, and the economic impacts to the Moab and Crescent Junction areas, including availability of housing, local employment opportunities, growth in retail businesses, as well as potential adverse effects on real estate values near the disposal cell and decreases in tourism because of negative perceptions about health risks associated with relocating the pile. Another concern is the effect on air quality in the communities of Moab and Thompson Springs during the remediation process, in particular, radon emissions from the tailings pile once it is opened up.



## Project Decision-Making Process

The Floyd D. Spence National Defense Authorization Act specified that DOE prepare a plan for remediation. The DOE Moab Project team prepared a *Preliminary Plan for Remediation*, and on October 30, 2001, the DOE Assistant Secretary of Environmental Management transmitted the document to the National Academy of Sciences for its review. The intent of the Academy's review was not to make a recommendation on the final disposition of the tailings, but rather to provide recommendations on the DOE plan. The Academy completed its review of the plan in June 2002 and provided recommendations to the Secretary of Energy on additional information that should be included in the document. In July 2002, the DOE Moab Project team issued a response to the Academy's comments and transmitted the response to DOE Headquarters in Washington, DC.

To fulfill the National Environmental Policy Act (NEPA) requirement of considering the full range of reasonable alternatives and associated environmental effects of significant federal actions, DOE initiated the NEPA process for the Moab Project. Under NEPA, DOE encourages and facilitates public participation in its decisions that affect the quality of human health and the environment. In January 2003, DOE hosted six public scoping meetings in towns near alternative disposal site locations to solicit public comments on cleanup alternatives for the remediation of the Moab Project Site and vicinity properties. DOE invited numerous federal, state, local, and tribal agencies to become cooperating agencies in the preparation of the EIS for the Moab Project. These agencies assisted DOE in identifying all reasonable alternatives and significant environmental, social, or economic impacts associated with the proposed action. Twelve agencies agreed to be cooperating agencies, and DOE established a schedule of cooperating agency interactions and held separate meetings with cooperating agency representatives. DOE also contacted Native American tribes for assistance in identifying traditional cultural properties within or near the proposed disposal site locations or the proposed haul and pipeline routes.

In November 2004, DOE released to the public and invited comments on the *Remediation of the Moab Uranium Mill Tailings, Grand and San Juan Counties, Utah, Draft Environmental Impact Statement*. In this document, DOE analyzed the potential environmental impacts of both on-site and off-site disposal alternatives and ground water remediation. DOE also analyzed the No Action alternative as required by NEPA implementing regulations promulgated by the Council on Environmental Quality.

In January 2005, DOE hosted public hearings in the communities of Green River, Moab, White Mesa, and Blanding, Utah, to provide a forum to receive public comments on the draft EIS. Comments were accepted through February 18, 2005, and beyond that date to the extent practicable. On April 6, 2005, DOE announced that its preferred alternatives concerning the Moab Project Site were to actively remediate the associated ground water and to dispose of the tailings pile and other contaminated materials at the Crescent Junction location. Comments DOE received on the information presented in the draft EIS and DOE responses to those comments are included as Volumes III and IV of the final EIS. The final EIS was issued in July 2005 followed by the Record of Decision in September 2005.

Major project documents are posted on the DOE Moab Project website (<http://gj.em.doe.gov/moab>) and paper copies are available in the Moab Project Public Reading Rooms; locations are listed in the Public Participation Activities section.

## **Public Participation Activities**

Public participation is an important part of the NEPA process. Formal provisions for participation by all interested parties are detailed in Title 40 *Code of Federal Regulations* (CFR) Parts 1500–1508, the Council on Environmental Quality's implementing procedures for NEPA; and in 10 CFR 1021, DOE's implementing procedures for NEPA. The following public participation activities will be conducted in support of the DOE goal of actively informing the public about the Moab Project to provide opportunities for communication between DOE and the public.

### **Public Meetings**

Public meetings will be held at least semiannually or as circumstances dictate to address issues of importance to stakeholders. These meetings will provide information about the Moab Project and will seek comments from attendees. DOE will provide sufficient advance notice of the date, time, and location of meetings so that interested stakeholders can plan to attend.

### **Public Availability Sessions**

Public availability sessions are opportunities for interested stakeholders to meet with project personnel in an informal setting. These sessions are held to identify and answer stakeholder concerns and may be held in lieu of public meetings to allow for more informal discussions about the project.

### **Small Group Meetings**

Stakeholders may request DOE staff to meet with small groups. These meetings provide opportunities to address specific concerns or issues. The Moab Tailings Stakeholder Group is a committee established by the State of Utah and Grand County Council and is separate from DOE; DOE attends and participates in this committee's meetings by invitation only.

### **Briefings for Local Officials**

DOE Moab Project staff will meet with Grand County Council and City of Moab officials as issues arise. These meetings are also intended to provide status updates of the Moab Project.

### **Fact Sheets, Information Updates, and Technical Summaries**

DOE will prepare short formal documents for public distribution to provide a project status update and to describe technical and informational components of the Moab Project.

## News Releases

DOE will issue news releases to announce public meetings, provide information on project activities, and for other newsworthy events. News releases will be distributed to identified news media and other stakeholders and will be posted on the DOE Moab Project website.

## Display Ads/Articles

Display ads will be prepared, as needed, and placed in local print media to announce public meetings and other special events. Periodically, an article to update the project status may be submitted to the local print media.

## Internet Website

Documents, fact sheets, information updates, technical summaries, selected project documents, meeting announcements, and news releases will be posted to the DOE Moab Project website. The Moab Project website address is <http://gj.em.doe.gov/moab>.

## E-mail Address

DOE has established an e-mail address to receive comments on the Moab Project. The address is [moabcomments@gjo.doe.gov](mailto:moabcomments@gjo.doe.gov). The Moab Project team will respond to e-mail messages received at this site.

## Toll-Free Hotline

A toll-free Moab Project hotline has been established for the convenience of stakeholders. The number is 1-800-637-4575. The hotline includes options to leave a message for the project, listen to employment opportunities, or request a document.

## Public Reading Rooms

DOE has established three Public Reading Rooms, which contain documents and information related to the Moab Project.

The Reading Rooms are located at:

Grand County Library  
25 South 100 East  
Moab, Utah  
(435) 259-5421

Library hours:  
9:00 a.m. to 8:00 p.m. Monday through  
Wednesday  
9:00 a.m. to 7:00 p.m. Thursday and Friday  
9:00 a.m. to 5:00 p.m. Saturday  
Closed Sunday

Blanding Branch Library  
25 West 300 South  
Blanding, Utah  
(435) 678-2335

Library hours:  
Noon to 7:00 p.m. Monday through Thursday  
2:00 to 6:00 p.m. Friday  
10:00 a.m. to 2:00 p.m. Saturday  
Closed Sunday



White Mesa Ute  
Administrative Building  
(off Highway 191)  
White Mesa, Utah  
(435) 678-3397

Library hours:  
8:00 a.m. to 4:30 p.m. Monday through Friday  
Closed weekends

The official project record is located at the DOE Environmental Management office in Grand Junction, 2597 B  $\frac{3}{4}$  Road, Grand Junction, Colorado.

## **Educational Programs and Outreach Activities**

DOE is committed to supporting educational initiatives designed to improve curriculum in schools and will coordinate educational partnerships with local schools as appropriate. In addition, the DOE Moab Project team will support and participate in educational outreach activities, such as environmental fairs, science fairs, and career days.

## **Speakers Bureau**

A cadre of speakers with varying levels and areas of expertise are employed at the DOE Environmental Management office in Grand Junction. Speakers will be available to participate in community and educational activities. Arrangements for speakers are made by contacting Wendee Ryan, contractor Public Affairs Manager, at 970-248-6765.

## **Local Office**

The local Moab Project Site is staffed 6 days per week. Irwin Stewart, contractor Site Manager, may be contacted at 435-259-5131.

## **Information Contacts**

The DOE Moab Project Manager is the primary information contact for public inquiries regarding site activities:

Donald R. Metzler  
Moab Federal Project Director  
U.S. Department of Energy  
2597 B  $\frac{3}{4}$  Road  
Grand Junction, CO 81503  
970-248-7612  
970-248-6023 (fax)

E-mail: [moabcomments@gjo.doe.gov](mailto:moabcomments@gjo.doe.gov)  
Toll-free hotline: 1-800-637-4575

## History and Highlights

- 1956 Uranium Reduction Company begins operating Moab mill, which is regulated by the U.S. Atomic Energy Commission as directed by the Atomic Energy Act of 1954.
- 1962 Atlas Minerals Corporation acquires the site.
- 1974 Process circuits are modified to reduce the amount of water used for milling.
- 1978 The Uranium Mill Tailings Radiation Control Act amends the Atomic Energy Act of 1954 and mandates cleanup of potentially hazardous uranium mill tailings to provide stricter controls on future handling and disposal of wastes from the processing of uranium ore.
- 1979 Atlas' license is renewed with the U.S. Nuclear Regulatory Commission.
- 1984 Moab mill ceases operation under License SUA-917.
- 1988 Decommissioning begins, significant Reclamation Plan revisions include a ground water detection monitoring program and dewatering of the mill tailings pile.
- 1989 Construction of an interim cover over the tailings pile begins.
- 1992 Revised Atlas Reclamation Plan indicates that mill decommissioning will be initiated to remove structures.
- 1993 Environmental Assessment for the Moab Project Site published in the *Federal Register* proposes selected revisions to the Atlas Reclamation Plan. Extensive adverse public comment is received; U.S. Nuclear Regulatory Commission decides to reevaluate the entire plan.
- 1994 U.S. Nuclear Regulatory Commission elects to prepare an EIS to evaluate the Reclamation Plan (*Federal Register* notice 3/30/94).
- 1995 Interim cover over the tailings pile is completed.
- 1995 U.S. Nuclear Regulatory Commission consults with U.S. Fish and Wildlife Service and submits an initial Biological Assessment.
- 1996 Decommissioning of mill structures is completed.
- 1996 U.S. Nuclear Regulatory Commission releases the draft EIS.
- 1996 U.S. Nuclear Regulatory Commission holds a public meeting for the draft EIS and Technical Evaluation Report on February 28 in Moab.
- 1997 U.S. Nuclear Regulatory Commission submits a supplement to the initial Biological Assessment to the U.S. Fish and Wildlife Service.
- 1997 U.S. Fish and Wildlife Service issues its first draft Biological Opinion; identifies moving the tailing pile as "a reasonable and prudent alternative."
- 1998 Atlas Minerals Corporation files for bankruptcy. Proposed reclamation activities as a Title II site are administered by PriceWaterhouseCoopers, a trustee appointed by the U.S. Nuclear Regulatory Commission.
- 1998 U.S. Fish and Wildlife Service issues a revised draft and a final Biological Opinion stating that the Ground Water Corrective Action Plan must be revisited and expedited.
- 1999 U.S. Nuclear Regulatory Commission completes the final EIS on the decision to stabilize mill tailings in place.
- 2000 Moab Project Site is designated as a Title I site under the Uranium Mill Tailings Radiation Control Act with the passage of the Floyd D. Spence National Defense Authorization Act.
- 2001 U.S. Fish and Wildlife Service withdraws its final Biological Opinion.

- 2001 PriceWaterhouseCoopers issues a report (prepared by Shepherd Miller, Inc.) on Moab Project Site hydrogeology and geochemistry.
- 2001 DOE assumes ownership of the site on October 1; the U.S. Nuclear Regulatory Commission license is terminated, and the DOE office in Grand Junction, Colorado, is assigned responsibility for reclamation and stewardship of the site.
- 2001 DOE Moab Project team develops the *Preliminary Plan for Remediation*, which is transmitted by the Assistant Secretary of Environmental Management to the National Academy of Sciences for review.
- 2001 DOE hosts a public meeting in Moab on December 11 to provide a status update on activities at the site.
- 2002 National Academy of Sciences hosts a public meeting in Moab on January 14 and 15.
- 2002 National Academy of Sciences provides comments on the *Preliminary Plan for Remediation* to the Secretary of Energy and hosts a public meeting in June to summarize its comments.
- 2002 DOE initiates NEPA process with publication in the *Federal Register* of the Notice of Intent to Prepare an
- 2003 DOE conducts six public scoping meetings in January to solicit public comment on the cleanup alternatives for remediation of the Moab Project Site and vicinity properties.
- 2003 Public scoping comment period ends on February 14.
- 2003 DOE conducts three public information meetings in June to provide a status of the EIS.
- 2003 DOE issues the Site Observational Work Plan in December to present the technical information necessary to allow selection of a ground water compliance strategy.
- 2004 DOE provides the Surface Water and Ground Water Environmental Impact Statement.Monitoring Plan in February for monitoring surface water and ground water during remediation of the site.
- 2004 DOE releases its draft Environmental Impact Statement in November assessing potential environmental impacts of proposed actions to remediate tailings, ground water, and contaminated soils at the Moab Project Site and vicinity properties.
- 2005 DOE hosts public hearings in January to provide a forum for comments on the draft EIS.
- 2005 Formal public comment period ends on February 18.
- 2005 DOE issues the Floodplain and Wetlands Assessment in February to support additional interim actions and Floodplain Statement of Findings.
- 2005 DOE announces the preferred alternatives for remediation of the Moab Project Site on April 6.
- 2005 DOE issues final EIS in July.
- 2005 DOE issues Record of Decision on September 14.
- 2005 DOE conducts two public meetings in October on the status of the Moab Project and next steps towards relocating the tailings pile.